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COMPETITIVE STRATEGIES OF INDIGENOUS CONSTRUCTION FIRMS

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ABSTRACT

The Nigerian construction market is one of the most vibrant and largest in Africa. However, indigenous construction firms (ICFs) in Nigeria struggle to survive in a harsh business environment characterized by intense competition and relatively low profit margin. Hence, the aim of this study was to explore the competitive strategies adopted by ICFs in order to improve their competitiveness in spite of stiff competition. The study adopted a cross sectional survey research approach with the use of questionnaires. Seventy two (72) well-structured copies of the questionnaire were distributed to ICFs in Lagos and Abuja, Nigeria based on convenient sampling technique. Data obtained was analyzed by means of descriptive statistics and Spear man's rank correlation. The findings of the study showed quality in constructed facilities as the most significant competitive strategy of ICFs. The study also indicated a strong and positive correlation between the competitive strategies of quality, schedule and cost. Since tradeoffs in any of these three (quality, schedule and cost) basic project performance criteria can have a devastating impact on project performance, the study concludes that ICFs adopt innovative and inclusive competitive strategies that focus on quality while attempting to achieve on-schedule performance and cost reduction in construction operations.

Key words: Competitiveness, Construction Market, Indigenous Construction Firms, nigeria, strategy Paper Type: Research Article.

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1. INTRODUCTION

The construction industry is a major sector in all economies. It contributes significantly to both Gross Domestic Product (GDP) and Gross Fixed Capital Formation (GFCF) of all nations. The Nigerian construction market in particular, has been described as vibrant and among the largest in Africa (Odediran, Adeyinka, Opatunji and Morakinyo, 2012). It plays host to the Lagos Atlantic City Project; a 10million square meters prime estate built on reclaimed land from the

Atlantic Ocean (Tunji-Olayeni, Emetere and Afolabi, 2017). However, indigenous construction firms (ICFs) in Nigeria struggle to survive in a harsh business environment characterized by intense competition and relatively low profit margin. Some factors have been found to inhibit the competiveness of ICFs. These factors include: poor work quality (Oke and Abiola-Falemu, 2009), cost over run (Omoregie and Radford, 2005), frequent delays (Aibinu and Jagboro, 2002), increased rework (Oyewobi, Ibironke, Ganiyu and Ola-Awo, 2011) and low productivity (Adenikinju, 2005). Improved competitiveness of ICFs can lead to increased market share for ICFs and consequently increase the level of profits earned. Profitability of ICFs as a result of improved competitiveness can contribute significantly to Nigeria's GDP through the interaction between the construction industry and other industries in a demand and supply relationship. Furthermore, competitiveness of ICFs can bring about export of construction expertise to other countries thereby contributing to a country's Gross National Income (GNI). Profitability of ICFs, on account of competitiveness, can lead to growth and sustainability of local contractors and the construction industry at large. Competitiveness in the context of construction is the ability of a contractor to bid successfully for construction projects, provide construction services with superior quality, lower costs and with shorter time than its competitors, so as to attain superior performance (Lu, 2006) while strategy refers to decisions that have medium to long term impact on the activities of an organization by the use of its resources to create value for key stakeholders and to outperform competitors (Hubbard, Rice and Beamish, 2008). Given the potential benefits of competitiveness to both ICFs and the national economy, this study sets out to explore the competitive strategies adopted by ICFs in order to improve their competitiveness in spite of stiff competition in the construction market.

2. REVIEW OF LITERATURE

Competitiveness of Construction Firms Globally

Reports from the global construction scene indicate that the performance of the industry has been less than satisfactory. In the UK, these reports date back to 1944 where the Simon declaration emphasized the need for improvement in construction process especially in UK construction firms (Banwell, 1964). By the 1990s these calls for improvement had grown considerably. For instance, Latham (1994) called for improvement in competitiveness of construction firms by reforming the processes of contracting, tendering, designing, quality management, productivity, training and education. Egan (1998) advocated for improvements in productivity, profits, quality and safety which could bring about increased competitiveness of UK construction firms. Moreover, the International Council for Building Research (1999) revealed that the Council was created deliberately to improve the capacity and effectiveness of construction firms in order to meet the demand for quality building and engineering products in a highly competitive business environment.

In the US, there are some unsatisfactory reports of issues in its construction industry which inhibit competitiveness. For instance, frequent rework is beginning to take a significant chunk of the total cost of construction. Hwang, Thomas, Haas and Caldas (2009) reported that the direct cost of construction caused by reworks averages 5% of the total cost of construction in the US. Although China has one of the largest construction industries in the world (Ling, Low, Wang and Egbelakin, 2008), there are also reports of problems occurring within its construction firms that impede competitiveness. Some of these problems according to Wang, Ahmad and Raymond (2006) include cost overruns, schedule delay, low quality and stakeholders' dissatisfaction.

Construction firms in developing countries face more serious problems that hamper competitiveness and these problems are accentuated by inadequate resources and frameworks to address them (Gyandu – Asiedu, 2009). In India for instance, contractors are still grappling

with on-schedule performance i.e. timely completion of projects. Iyer and Tha (2006) reported that 40% of construction projects in India face problems of time overruns. Abbas (2006) revealed that ineffective time control is a common problem in the Malaysian construction industry which results in extra expenses, disputes and litigations to both clients and contractors.

In South Africa, poor contractor capacity, low productivity and low profit margin for contractors are common problems faced by construction firms (Department of Public Works, 1999) which hamper competitiveness. The common occurrence of contract administration problems, complex and lengthy payment procedures and delayed payments are common occurrence in Ghanaian construction firms (Anvuur, Kumaraswamy and Male, 2006; Gyandu – Asiedu, 2009). These also inhibit competitiveness of its construction firms.

Factors Affecting Competitiveness of Indigenous Construction Firms in Nigeria

Literature from the Nigerian construction industry reveals many problems which negatively affect the competitiveness of construction firms. These problems are mostly in the form of poor quality of constructed facilities, delays, cost overruns, low client satisfaction, increased rework and low productivity. Oyewobi *et al.* (2011) noted that the Nigerian construction industry is an ailing one because its performance curve is abnormal. For example, the performance problem of time overrun in the Nigerian construction industry has become common place. Seven out of ten projects carried out in Nigeria suffered delay in their execution which ultimately leads to extra cost to the client (Odeyinka and Yusif, 1997). Ayodele and Alabi (2011) found out that poor scheduling of project operations is a major cause of project delay in Nigeria. Cost overrun is another performance problem that is prevalent in the Nigerian construction industry (Elinwa and Buba, 1993; Omoregie and Radford, 2005). Contractor related causes of cost over run include: incorrect planning, wrong method of estimation and poor contract management (Tunji-Olayeni, Lawal andAmusan, 2012).

Poor quality of materials and workmanship is another factor affecting competitiveness of indigenous construction firms in Nigeria. For instance, Idoro and Akande–Subar (2008) compared client assessment of the quality performance of indigenous and expatriate contractors in Nigeria. The results indicated that the quality of materials used for construction and the standard of workmanship of expatriate contractors are better than those of indigenous contractors while the magnitude of defective work and the amount of retention fee spent to rectify defects that occur during defect liability period are higher in projects executed by indigenous contractors than those of expatriate contractors. Furthermore, Oke and Abiola-Falemu (2009) investigated the effects of poor quality materials and workmanship on building collapse. The study showed that the quality of materials and standard of workmanship used by indigenous contractors in Nigerian is not satisfactory and that the problem lies in the use of inappropriate materials supplied to site and inefficient supervision of workmen.

Tunji-Olayeni *et al.,* (2017) noted that poor construction leads to rework. Oyewobi *et al*. (2011) carried out a research aimed at enhancing efficient project delivery by evaluating the cost of rework for building projects in Niger State, Nigeria. It was discovered that cost of rework was about 5% of the total cost of construction. All these problems have resulted into substantial increases observed in the cost of construction projects. According to Mbachu and Nkado (2004), this substantial increase has negative implications for major stakeholders in the industry which includes loss of client confidence in consultants, added investment risks, inability to deliver value to clients, and disinvestment in the construction industry; thereby undermining the viability and sustainability of construction firms and the construction industry at large.

Low productivity is also another factor affecting the competitiveness of indigenous construction firms in Nigeria. Adenikinju (2005) graded the productivity performance in the

Nigerian construction industry to be below average and noted that technical efficiency was on the decline in the Nigerian construction industry.

Porter's Competitive Theories of the Firm

Porter's theories of competitiveness were developed by Michael Porter in 1980 and 1985. Porter's competitiveness theories consist of three other theories namely: Porter's five forces framework, Porter's theories of competitive strategy and Porter's value chain analysis.

Since the focus of this paper is to explore competitive strategies of ICFs, this review is limited to Porter's theories of competitive strategy.

Porter's Theory of Competitive Strategies

Porter (1980) developed the three generic competitive strategies – cost leadership, differentiation and focus.

Cost leadership approach to competitiveness implies that a firm becomes the lowest cost producer in order to outperform rivals without l123osing any potential profits (Pamulu, 2010). Such an approach calls for a strong emphasis on cost reductions by adopting tight cost and overhead control, minimizing cost across the departments, and conducting operations and activities in an efficient manner (Kale and Arditi, 2002).

Differentiation strategy requires the firm to have unique or different products or services perceived by customers which enables the firm to command higher prices than industry average (Kale and Arditi, 2002; Pamulu, 2010). This strategy calls for differentiating aspects of the business such as the products or services offered, the technology used, the delivery system offered, the marketing approach adopted, and a wide range of other aspects, depending on a particular industry's characteristics (Kale and Arditi, 2002)

Focus enables a firm to efficiently serve a particular segment or niche within the market (Pamulu, 2010). It could be a narrow approach which implies concentrating on certain markets, clients, customers, and geographical location, and offering narrow range of products/services; or a broad approach which means undertaking works in several different market segments for a variety of different clients in many different geographical locations and offering a wide variety of products/services (Kale and Arditi, 2002).

3. RESEARCH METHOD

This study was aimed at exploring the strategies adopted by indigenous contractors to improve their competitiveness. A quantitative research design was adopted for the study with the aid of well-structured questionnaire. Although the questionnaire was designed in line with Porter's (1980; 1985) competitive strategies, a hybrid strategy for achieving competitiveness was introduced in the questionnaire. The hybrid strategy was adapted from (Kale and Arditi, 2002). This hybrid strategy was adopted in this research because its items of measurement are more related to the construction context. The hybrid strategy is made up of the following items: (i) competing on the basis of cost (ii) competing on the basis of quality (iii) competing on the basis of time and (iv) competing on the basis of scope of operation.

Seventy two (72) copies of well-structured questionnaires were distributed to indigenous construction firms in Lagos and Abuja, based on convenient sampling technique.

The questionnaire was divided into two (2) sections. Section one requested general information about the respondents organization while section two sought answers to the strategy adopted by the organization for achieving competitiveness.

The reliability of items in the questionnaire was determined by Cronbach's alpha method and the result showed Cronbach's alpha value of 0.717 indicating a high degree of internal consistency.

Two main types of analyses were conducted. The first analysis was descriptive statistics while the second analysis was correlation using the Spearman rank order correlation

4. RESULTS AND DISCUSSIONS

Response Rate

Seventy two (72) copies of the questionnaire were distributed out of which 53 were properly filled and returned. This gives a response rate of approximately 74%. The relatively high response rate obtained in this study could be due to the frequent calls made and e-mails sent to the respondents. Some of the studies carried out previously on contractors‟ competitiveness provided relatively low response rate. For instance Tan *et al.* (2007) and Lu (2006) had response rates of 23.96% and 30.67% respectively. However, other studies for example, Chan (2006) and Shrair (2011) reported relatively high response rates of 90.91% and 73.33% respectively.

Firms' Characteristics

This section presents the characteristics of the indigenous construction firms investigated. Firms' characteristics investigated in this research include firms' size, number of jobs bidded for, number of jobs secured and turn - over of firm.

Firms' Size

Out of the 53 indigenous construction firms surveyed in this research, 64.2% had less than 50 people in their work force, 20.8% had between 51-100 people in their work force, 7.5% had between 101-150 people in their work force, 3.8% of the indigenous construction firms surveyed had between 151-200 and another 3.8% had more than 200 people in their work force (*Table 1*). This indicates that majority of the indigenous construction firms surveyed have a workforce less than 50. This may be due to the fact that most of the indigenous construction firms surveyed might not be able to sustain a work force that is greater than 50

Table 1 Number of Workforce

Number of Workforce	Frequency	Percent
Less than 50	34	64.20
51-100	11	20.80
101-150	4	7.50
151-200	2	3.80
Above 200	2	3.80
Total	53	100.00

Jobs Bidded For

Of all the indigenous construction firms surveyed, 79.2% indicated that the average number of jobs bidded for in a year is more than 3. While the remaining 20.8% indicated that the average number of jobs they bid for yearly is 3 (Table *2*). This shows that a greater percentage of the indigenous construction firms surveyed seek for many project opportunities as possible.

Table 2 Number of Jobs Bidded For

Number of jobs bidded for	Frequency	Percent
3	11	20.80
Above 3	42	79.20
Total	53	100.00

Jobs Secured

Out of the 53 indigenous construction firms surveyed, 6 indicated that they secured only one job yearly, 20 indicated that the average number of jobs secured yearly was two, 15 indigenous construction firms indicated three jobs yearly while twelve firms indicated that they secure more than 3 jobs yearly (*Table 3*). This shows that the average number of jobs secured yearly by indigenous construction firms surveyed is 2. Since most of the indigenous construction firms surveyed secure an average of two jobs yearly, they are unable to generate enough resources to sustain a work force of more than 50 persons (*Section firm size*).

Table 3 Average Number of Jobs Secured Yearly

Number of jobs secured	Frequency	Percent
1	6	11.30
2	20	37.70
3	15	28.30
Above 3	12	22.60
Total	53	100.00

Turnover in =N= Billion

Twenty six indigenous construction firms had a turnover of less than 0.20 billion Naira. Eleven indigenous construction firms had turnover of between 0.21 and 0.50 Billion Naira. Eight indigenous construction firms had turnover of between 0.51 and 0.70 Naira. Five indigenous construction firms had turnover of between 0.71-1 Billion Naira and only three indigenous construction firms had turnover that was greater than 1 Billion Naira (See *Table 4*).

Table 4 Turnover in Billions

Number of jobs secured	Frequency	Percent
< 0.20 billion Naira	26	49.10
0.21-0.50 billion Naira	11	20.80
0.51-0.70 billion Naira	8	15.10
0.71-1 billion Naira	5	9.40
> 1 billion Naira	3	5.70
Total	53	100.00

Competitive Strategies of ICFs

From Table 5, the three most significant competitive strategies adopted by ICFs in Nigeria are: achieving high quality in constructed facilities, being highly responsive to clients‟ request and achieving on-schedule performance in operations.

Table 5 Ranking of Contractors' competitive Strategies

Strategy	Mean	Standard deviation	Rank
Achieving high quality in constructed facilities	4.75	0.55	1
Being highly responsive to clients requests	4.57	0.57	2
Achieving on-schedule performance in operations	4.43	0.57	2
Improving the quality of contacting services offered	4.38	0.71	4
Improving the efficiency of the contracting activities	4.34	0.83	5
Accommodating the clients acceleration request	4.15	0.84	6
Reducing costs in construction operations	4.13	0.90	7
Reducing costs in administrative activities	3.94	0.95	8
Achieving high quality beyond the requirements in the specification	3.87	1.11	9
Attempting to deliver constructed facilities ahead of schedule	3.68	1.21	10
Operating in specific construction market segments	3.38	0.97	11
Serving a specific geographic construction market	3.21	1.06	12
Serving a specific group of clients	3.19	1.16	13
Offering a limited range of project delivery systems	3.06	1.13	14

Relationship between Firms' Turnover and Firms' Strategies

Table 6 shows Spearman's Rank Correlation between firms' turn over and firms' strategies. There is a moderate, positive and significant correlation between firms' turnover and achieving high quality in constructed facilities. In order words the bigger the indigenous construction firm the greater the penchant to achieve high quality in constructed facility.

There is also a moderate, positive and significant relationship between firms' turnover and achieving on-schedule performance in operations. This indicates that the bigger the indigenous construction firm the greater the desire to achieve on-schedule performance. Moreover, table 6 shows a significant positive but moderate correlation between firms' turnover and improving the quality of construction services offered. This implies that the bigger the indigenous construction firm the more the quality of construction services offered. Furthermore, the table indicates a moderate, significant and positive relationship between firms' turnover and improving the cost efficiency of contracting activities.

Table 6 Spearman's Rank Order Correlation between Firms Turnover and Firms' Strategies

Strategy	Coefficient	Strength	Significance	Remark
Achieving high quality in Constructed facilities	0.331*	Moderate +	0.015	SS
Being highly responsive to Clients requests	0.211	Weak +	0.129	NS
Achieving on-schedule Performance in operations	0.517**	Moderate +	0.000	SS
Improving the quality of Constructed services	0.422**	Moderate +	0.002	SS
Improving the cost efficiency of contracting activities	0.475**	Moderate +	0.000	SS
Accommodating the client's Acceleration requests	0.187	Very weak +	0.179	NS
Reducing cost in construction operation	0.087	Very weak +	0.537	NS

**correlation is significant at the 0.01 level (2-tailed)

*correlation is significant at the 0.05 level (2-tailed)

NS- not significant

SS-statistically significant

Table 7 reveals that correlation coefficient for correlation between achieving high quality in constructed facilities and achieving on-schedule performance is 0.300. This indicates a positive but weak relationship. However, the correlation is significant as $p = 0.029 < 0.05$. This means that the more firms strive to achieve high quality in constructed facilities the more they also strive to achieve on-schedule performance.

From table 7 the correlation coefficient for relationship between achieving high quality in constructed facilities and improving the cost efficiency of contracting activities is 0.368. This shows a positive and moderate relationship. Moreover, the correlation is significant as $p = 0.007 < 0.05$. This implies that the more firms strive to achieve high quality in constructed facilities the more they also strive to improve cost efficiency in contracting services.

Correlation coefficient for correlation between achieving high quality in constructed facilities and reducing cost in construction operation is 0.334. This indicates a moderate and positive correlation. Furthermore, the relationship is significant as $p = 0.015 < 0.05$. This means that the more firms strive to achieve quality in constructed facilities the more they strive to reduce cost in construction operations.

There is a significant, positive and moderate correlation between achieving on-schedule performance and improving cost efficiency of contracting services. This is indicated by the correlation coefficient 0.390 and p value $0.004 < 0.05$ in table 7. This implies that the more firms strive to achieve on-schedule performance the more they strive to improve cost efficiency of contracting services.

Correlation coefficient for correlation between on-schedule performance and accommodating clients‟ acceleration requests is 0.402 (table 7). This shows a positive and

moderate correlation. P value for the correlation is 0.003 < 0.05 (table 7) which indicates a significant relationship. This shows that the more a firm strives to achieve on-schedule performance the more it accommodates clients‟ acceleration requests.

From table 7 the correlation between improving the quality of construction services offered and improving the cost efficiency of contracting services is significant, moderate and positive. This is indicated by the correlation coefficient 0.450 and p value 0.001 < 0.05 in table 7 .This implies that the more firms strive to improve the quality of construction services offered the more they improve the cost efficiency of contracting services.

Table 7 Correlation between contractors' competitive strategies

	Hquality	HResClients	On schedule	QConSer	CEcONSER	CacceleReq	Cinconcatvt
Hquality	1	0.061	0.300*	0.233	0.368**	-0.076	0.334*
		0.662	0.029	0.093	0.007	0.589	0.015
HResClients	0.061	1	0.071	0.248	0.181	0.093	0.17
	0.662		0.615	0.073	0.195	0.509	0.225
On schedule	0.300*	0.071	1	0.066	0.390**	0.402**	-0.019
	0.029	0.615		0.637	0.004	0.003	0.89
QConSer	0.233	0.248	0.066	1	0.450**	0.156	0.016
	0.093	0.073	0.637		0.001	0.265	0.908
CEcONSER	0.368**	0.181	0.390**	0.450**	1	0.262	0.033
	0.007	0.195	0.004	0.001		0.058	0.815
CacceleReq	0.076	0.093	0.402**	0.156	0.262	1	0.066
	0.589	0.509	0.003	0.265	0.058		0.636
Cinconcatvt	0.334*	0.17	0.019	0.016	-0.033	0.066	1
	0.015	0.225	0.89	0.908	0.815	0.636	

**correlation is significant at the 0.01 level (2-tailed)

*correlation is significant at the 0.05 level (2-tailed)

Key

Hquality- Achieving high quality in constructed facility

HResClients – Being highly responsive to clients request

On schedule – Achieving on-schedule performance in operations

QConSer – Improving the quality of constructed Services offered

CacceleReq-Accommodating clients acceleration requests

Cinconcatvt-Reducing costs in construction operations

5. DISCUSSION OF FINDINGS

Competitive Strategies of ICFs

The most significant competitive strategy adopted by ICFs is achieving high quality in constructed facilities (*Table 5*). This finding is consistent with that of Kale and Arditi (2002) who assessed how construction firms in the US position themselves in order to improve competitiveness. Kale and Arditi (2002) revealed that most of the construction firms in the US

place strong emphasis on the quality of the facilities they construct as a means of improving competitiveness.

Quality in constructed facilities is one of the factors that determine clients' satisfaction (Karna, 2004). Furthermore, only clients who are fully satisfied with the quality of constructed facility would be willing to do repetitive work with the same contractor or would be willing to refer other clients to such a contractor (Egemen and Mohammed, 2005). By achieving high quality in constructed facilities, indigenous construction firms are able to secure repetitive works thereby improve their competitiveness and market share. This explains why indigenous construction firms have ranked achieving high quality in constructed facility as the most significant strategy for gaining competitive advantage in the Nigerian construction market.

The second important strategy adopted by indigenous construction firm in gaining competitive advantage is being highly responsive to clients' requests (*Table 5*). Indigenous construction firms understand that clients play a vital role in their survival in the construction market. Hence, indigenous construction firms are quick to provide their clients with what they need in terms of design and material variation or acceleration requests. Gomolski (2001) in his study of businesses in the real time found out that responsiveness to clients is a source of competitive advantage for many businesses. Moreover, David (2005) noted that a key to winning and keeping target customers is to understand their needs better than rivals do.

Achieving on - schedule performance in operations was found to be the third important strategy for gaining competitive advantage *(Table 5)*. This may be due to the fact that every client has a time frame within which he desires that his project be completed. A client whose purpose of construction is commercial has projected that after a particular period his facility (investment) would begin to yield some returns. Moreover, the client who embarks on construction for other reasons aside commercial purposes also has a time at which he intends to put the facility to use. Anything short of this time expectation is usually not acceptable by the client. In situations where construction time extends beyond the agreed time extra expenses are incurred. Construction firms are aware of this as such they strive to deliver projects on-schedule. Maloney (2002) noted that on-schedule performance is a factor that promotes client satisfaction and ultimately improves contractors' competitiveness. Improving the quality of contracting services offered was ranked the fourth significant strategy for gaining competitive advantage by indigenous construction firms (*Table 5*). Ling and Chong (2005) found that the quality of contracting services is antecedent to client satisfaction. Moreover (Al-Shorafa, 2008) noted that client satisfaction gives the contractor an opportunity to remain a potential partner of the client in the future thereby securing jobs for the contractor.

It is worth noting that all the variables measured under focus strategy were ranked relatively low by indigenous construction firms in Nigeria. This may be because the most important priority for indigenous construction firms is survival amidst stiff competition and low profit margin. Hence, indigenous construction firms strive to secure jobs irrespective of client type or geographical location. This agrees with the findings of Kale and Arditi (2002) that construction firms which are not restricted to a particular client type and geographical location experience more growth in contract awards than those that operate within a specific geographical location or patronize a particular client type.

Correlation between Firms' Strategies

The prevalent tradeoffs in quality, time and cost performance has necessitated the development of new and innovative contracting methods some of which emphasize the need to maximize quality while attempting to achieve on-schedule performance (Afshar et al., 2007; Narayanam and Suribabu, 2014). Consequently, firms that strive to achieve high quality in constructed facilities also strive to achieve on-schedule performance as indicated in the positive correlation

between achieving high quality in constructed facilities and achieving on-schedule performance.

As earlier noted, quality irrespective of the type is relatively expensive. As such, firms look for ways of eliminating or reducing cost in construction activities. Firms that strive to achieve high quality in constructed facilities also strive to reduce cost in construction activities. Hence the positive relationship between achieving high quality in constructed facility and reducing cost in construction activities. Firms also attempt to improve cost efficiency in construction services so that cost savings can be used to offset cost of quality. In order words firms that strive to achieve high quality in constructed facilities also strive to improve cost efficiency in contracting activities. This explains the correlation between achieving high quality in constructed facility and improving cost of efficiency in construction service.

Conclusion and Recommendation

This paper explored the competitive strategies adopted by ICFs in Nigeria. The most significant competitive strategy adopted by ICFs is achieving high quality in constructed facilities. The competitiveness of contractors will be greatly enhanced when clients do repeat business with a contractor or refer such contractor to other clients because of the satisfaction derived from quality of work. Hence, it is recommended that ICFs ensure quality in constructed facilities. Moreover the study revealed a strong and positive correlation between quality, on-schedule performance and cost efficiency competitiveness strategies. Since the tradeoffs of any of these three (quality, schedule and cost) basic project performance criteria can have a devastating impact on project performance, it is recommended that ICFs adopt innovative competitiveness strategies that will emphasize the need to maximize quality while attempting to achieve on-schedule performance and reducing cost in construction operations.

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